

REMARKS

The December 6, 2007 Office Action regarding the above-identified application has been carefully considered; and the amendments above together with the remarks that follow are presented in a bona fide effort to respond thereto and address all issues raised in that Action. The specification has been amended to update the reference to the parent application by adding the issued patent number. The claims have been amended to more clearly distinguish over the patent applied in the art rejection. Care has been taken to avoid entry of new matter. For reasons discussed below, it is believed that this case is in condition for allowance. Prompt favorable reconsideration of this amended application is requested.

The only issue raised in the Office Action related to novelty over a single cited patent. Specifically, the Action included only a rejection of claims 10-25 under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,021,440 to Post et al. (hereinafter Post). This rejection is traversed on the ground that Post does not in fact meet all requirements of Applicants' pending claims, particularly as amended above.

The present application relates to various equipment for processing an input signal, such as a received digital broadcast signal, where the input signal includes a compressed video signal and a compressed audio signal, and where the input signal further includes a data signal. The data signal may include compressed video or compressed audio, although the compression method for the video or audio in the data signal may not be compatible with the video decoder or the audio decoder used for decoding of the main compressed video or audio signals. As disclosed, the CPU analyzes the received data signal and makes two determinations. First, the CPU determines if the data signal includes compressed video or audio. If so, the CPU determines if the compression method used for the compressed video or audio contained in the

data signal is supported by the video decoder or the audio decoder. If so, the video or audio from the data signal is buffered and made available for decoding by the video decoder or the audio decoder. However, if the compression method used for the compressed video or audio contained in the data signal is not supported by the video decoder or the audio decoder, then a data decoder (e.g. software executed by the CPU) decodes the video or audio contained in the data signal. Attention may be directed, for example, to the discussion running from line 7 of page 11 to line 21 of page 12, in the original application text.

Independent claim 10 recites, *inter alia*:

- an input terminal that receives a compressed input signal including a first compressed video signal, a first compressed audio signal and a data signal;

- a demultiplexer that separates the data signal from the input signal;

- a decoder buffer that stores the first compressed video signal and the first compressed audio signal;

- a video decoder that decodes the first compressed video signal stored in the decoder buffer;

- an audio decoder that decodes the first compressed audio signal stored in the decoder buffer;

- a memory that stores the data signal separated by the demultiplexer;

- a CPU that analyzes the data signal stored in the memory; and

- a data decoder that decodes the data signal stored in the memory;

wherein the CPU allows the data signal analyzed by the CPU to be stored in the decoder buffer for decoding by the video decoder or the audio decoder, when the analyzed data signal includes a second compressed video signal or a second compressed audio signal, and the video decoder or the audio decoder supports the compression method used for the second compressed video signal or the second compressed audio signal included in the data signal.

As such, the claim positively requires that the received signal includes a first compressed video signal, a first compressed audio signal and a data signal. A decoder buffer stores the first compressed video and audio signals for decoding by the video and audio decoders, whereas the

memory stores the data signal. A data decoder may, in some cases, decode the data signal from the memory. However, when (1) the data signal includes a second compressed video signal or a second compressed audio signal, and (2) the video decoder or the audio decoder supports the compression method used for the second compressed signal included in the data signal, then the CPU allows the data signal analyzed by the CPU to be stored in the decoder buffer for decoding by the video decoder or the audio decoder. It is respectfully submitted that Post does not suggest storage of the data signal in the memory, analysis of the data or supplying the data to the decoder buffer for decoding by the video or audio decoder, when the specified conditions are met. Also, there appears to be no data decoder in Post.

Post discloses a video decoder 160 and an audio decoder 162 in FIG. 1B. Post teaches demultiplexing and decoding of compressed digital video information and compressed digital audio information via those decoders. Audio and video for different programs may be selected and processed from one multiplexed stream. However, Post does not discuss the inclusion of an ancillary data signal in the stream or any of the attendant analysis and processing recited in amended claim 10 for example, there is no disclosure of an additional data decoder functionality.

Hence, claim 10 and the claims that depend from it are not anticipated by Post. Claim 16 includes limitations similar to those of claim 10 discussed above, therefore claim 16 should be similarly novel over Post.

Although other aspects of the claims differ, claims 19 like claim 10 includes the recitations:

a data decoder that decodes the data signal;

wherein the CPU allows the data signal analyzed by the CPU to be stored in the decoder buffer for decoding by the video decoder or the audio decoder, when the analyzed data signal includes a second compressed video signal or a second compressed audio signal, and the video decoder or the audio decoder

supports the compression method used for the second compressed video signal or the second compressed audio signal included in the data signal.

As discussed above, it is submitted that Post does not analyze a data signal in the recited manner and does not allow the data signal to be forwarded to the buffer for decoding by the video decoder or the audio decoder in the event that the recited conditions are met. Also, it is believed that Post does not disclose the additional data decoder. For at least these reasons, Post does not meet all of the requirements of claim 19 and claim 19 is not anticipated by Post.

Claim 17 recites, *inter alia*:

said CPU determines whether a second compressed video signal or a second compressed audio signal is included in said data signal, and determines the compression method used for the second compressed video signal or the second compressed audio signal included in the data signal; and

based on the result of the determinations, said CPU changes a destination decoder to which the data signal is outputted.

As discussed above, Post discloses processing and decoding multiplexed video and audio signals. However, Post does not address the situation in which the stream includes an additional data signal that may contain additional (second) compressed video or audio. Applicants therefore submit that Post does not teach that the CPU determines whether a second compressed video signal or a second compressed audio signal is included in the data signal, and if so, determining the compression method that was used for the second compressed video signal or the second compressed audio signal included in the data signal. As a result, Post does not suggest changing a destination decoder for output of the data signal (e.g. a data decoder as opposed to the audio or video decoder), based on the results of those determinations.

Hence, claim 17 and dependent claim 18 are not anticipated by Post.

Claim 20 recites:

a demultiplexer configured to receive a compressed input signal including a first compressed video signal, a first compressed audio signal and a data signal and to separate the data signal from the input signal;

a decoder buffer coupled to the demultiplexer to store the first compressed video signal and the first compressed audio signal;

a video decoder coupled to the decoder buffer to receive and decode the first compressed video signal;

an audio decoder coupled to the decoder buffer to receive and decode the first compressed audio signal;

a memory coupled to the demultiplexer to receive and store the data signal;

a CPU coupled to the memory to receive and analyze the data signal stored in the memory; and

a data decoder to decode the data signal from the memory,

wherein when the data signal includes a second compressed video signal or a second compressed audio signal that is compressed using a compression method that can be decoded by the video decoder or the audio decoder, the CPU causes the data signal to be stored in the decoder buffer to enable processing of the data signal by at least one of the video and audio decoders.

As such, the claim positively requires that the input signal processed by the demultiplexer includes a first compressed video signal, a first compressed audio signal and a data signal. A decoder buffer stores the first compressed video and audio signals for decoding by the video and audio decoders, whereas the memory stores the data signal. A data decoder may, in some cases, decode the data signal from the memory. However, when (1) the data signal includes a second compressed video signal or a second compressed audio signal, which (2) is compressed using a compression method that can be decoded by the video decoder or the audio decoder, the CPU causes the data signal to be stored in the decoder buffer to enable processing of the data signal by at least one of the video and audio decoders. It is respectfully submitted that Post does not suggest storage of the data signal in the memory, analysis of the data or supplying the data to the

decoder buffer for decoding by the video or audio decoder, when the specified conditions are met. Also, there appears to be no data decoder in Post.

As discussed above, Post discloses a video decoder 160 and an audio decoder 162 in FIG. 1B and teaches demultiplexing and decoding of compressed digital video information and compressed digital video information via those decoders. Audio and video for different programs may be selected and processed from one multiplexed stream. However, Post does not discuss the inclusion of an ancillary data signal in the stream, any of the attendant analysis and processing or the additional data decoder, as recited in amended claim 20. Hence, claim 20 and the claims that depend from it are not anticipated by Post.

It is respectfully submitted that the dependent claims recite further distinctions over Post. For example, it is not seen where Post discloses time division multiplexing of the first and second compressed signals in the decoder buffer of recited claims 12 and 22.

As another example, it is not seen where Post discloses the write address processing for the second compressed video or audio signal so that the video decoder and the audio decoder will stop, resume, or repeat decoding of data, as recited in claims 13 and 23. Column 5 (lines 1-34) of Post which was specifically cited against claims 13 and 23 discusses allocation of data buffer capacity for buffering the video and/or audio data. However, that text of Post does not disclose stopping, resuming, or repeating decoding of data according to a determined progress of the decoding (e.g. upon depletion of the second compressed video signal or the second compressed audio signal in the decoder buffer).

For reasons discussed above, Post does not satisfy all of the recitations of any of the pending claims (10, 16, 17, 19 or 20). Hence, the claims are all novel over Post, and the anticipation rejection over Post should be withdrawn.

Upon entry of the above claim amendments, claims 10-25 remain active in this application, all of which should be in condition for allowance. Accordingly, this case should now be ready to pass to issue; and Applicants respectfully request a prompt favorable reconsideration of this matter.

It is believed that this response addresses all issues raised in the December 6, 2007 Office Action. However, if any further issue should arise that may be addressed in an interview or by an Examiner's amendment, it is requested that the Examiner telephone Applicants' representative at the number shown below.

To the extent necessary, if any, a petition for an extension of time under 37 C.F.R. §1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

A handwritten signature in black ink, appearing to read "Keith E. George", is written over the printed name.

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